Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	WP Docket No. 07-100
Amendment of Part 90	)	
Of the Commission's Rules	)	

COMMENTS OF CANADIAN NATIONAL
IN SUPPORT OF PROPOSED AMENDMENT TO
47 C.F.R. § 90.238(e) REGARDING END OF TRAIN DEVICES

Pursuant to the *Second Further Notice of Proposed Rulemaking* in this docket released on March 10, 2010, FCC 10-36, and noticed in the *Federal Register* on April 14, 2010, 75 Fed. Reg. 19340, Canadian National Railway Company ("CNR") and its U.S. carrier operating subsidiaries[1] (collectively, with CNR, "Canadian National" or "CN") hereby submit their comments in support of a proposed change to Section 90.238(e) of the Commission's rules, 47 C.F.R. § 90.238(e), that would allow railroad "end of train" (or "EOT") telemetry devices to operate at a transmitter output power of eight watts. CN believes the proposed change will increase the reliability, efficiency and safety of train operations in the United States, with no adverse effect on any party. It also would make CN's U.S. rail operations more fluid with those in Canada, where CNR already operates EOT devices at eight watts.

CN's U.S. rail carrier subsidiaries, which report to the Surface Transportation Board on a consolidated basis under the name Grand Trunk Corporation, together form a Class I railroad which owns or operates on approximately 6,900 route miles of track in sixteen states.

---

[1] Bessemer and Lake Erie Railroad Company, Cedar River Railroad Company, Chicago, Central & Pacific Railroad Company, Duluth, Missabe and Iron Range Railway Company, Duluth, Winnipeg and Pacific Railway Company, Elgin, Joliet and Eastern Railway Company, Grand Trunk Western Railroad Company, Illinois Central Railroad Company, Sault Ste. Marie Bridge Company and Wisconsin Central Ltd.

While CNR's operations are mainly in Canada, CNR operates a line across northern Minnesota and also enters the United States for interchange purposes at points in Michigan and New York. CN's operations in the United States are subject to the regulatory jurisdiction of the Federal Railroad Administration ("FRA"), including the FRA's regulations regarding EOT devices at 49 C.F.R. § 232, Subpart E. The CN railroads also are "Railroad Licensees" under Section 90.7 of the Commission's rules, and utilize two-way EOT devices that operate on frequencies 452.9375 MHz and 457.9375 MHz pursuant to Commission authorization.[2] The telemetry function of EOTs is currently limited to a transmitter output power of 2 watts. 47 C.F.R. § 90.238(e).

CN is a member of the Association of American Railroads ("AAR"), which on October 2, 2007 filed the initial Petition for Rulemaking seeking a change in the two-watt limitation on EOT device telemetry transmissions contained in Section 90.238(e). AAR requested that Railroad Licensees be allowed to operate EOTs at up to eight watts, and the Commission has tentatively concluded that such a modification is justified to "accommodate the operational needs of EOT devices . . . ." *Second Notice* at ¶ 34. CN strongly supports the proposed change and the Commission's tentative conclusion, and endorses the reasoning provided by the AAR in its Petition.

A reliable transmission link between an EOT device and the locomotive is necessary for safe and efficient rail operations, and reliability has become a greater issue as train lengths have increased on CN and other railroads. As the AAR has previously pointed out, in certain circumstances FRA regulations require trains to slow or stop when the transmission link on a two-way EOT is lost. 49 C.F.R. § 232.407(g). A two-watt limitation provides little room for degradation of the signal between two ends of a train. Indeed, the front-to-rear "command" transmission on a two-way EOT device – such as an instruction from the locomotive to the EOT

[2] The two-way EOTs used by CN are often referred to as "SBUs", for "sense and brake units."

to apply the brakes from the rear of the train – already occurs at a power level of eight watts on CN trains in the United States, since such command functions are not considered a "telemetry" transmission under Section 90.7 of the Commission's rules subject to the two-watt limitation of Section 90.238(e). The proposed change would allow the command and telemetry functions of the same two-way EOT device to operate at the same wattage, and would assure that communications with EOT devices remain reliable across a range of operational scenarios.

CN has growing and successful experience with eight-watt EOT telemetry devices in Canada. CN began the phrase-in of eight-watt devices in Canada in July of 2009 and currently operates 51 eight-watt EOTs, primarily on its Northern Ontario Division. The topography of the division coupled with increased train lengths had made EOT communication losses at the two-watt level almost a continual event in that area. As in the U.S., trains in Canada are required to slow when an EOT signal loss occurs, which results in delays to following trains and can impact wider network operations. After testing and implementation of eight-watt EOTs, monthly delay minutes from all causes on the Northern Ontario Division decreased by 77%, with most if not all of the decrease attributable to the elimination of EOT telemetry loss.

In its experience to date with eight-watt EOT telemetry devices operating on hundreds of trains, CN is aware of no meaningful interference issues that have arisen with other frequency users, either inside or out of the railroad industry. CN expects the experience in the U.S. to be similar.

A change to an eight-watt limitation for EOT telemetry devices in the U.S. would be particularly beneficial for the continued improvement and efficiency of cross-border rail operations, of which CN obviously has many. The current difference between U.S. and Canadian regulatory requirements for railroad telemetry transmissions means that, unlike

locomotives, the same eight-watt EOT cannot be run-through on a train moving between the United States and Canada. The necessity of keeping an eight-watt EOT fleet captive to Canada has inhibited CN from converting more units, since CN would be unable to procure and manage its EOT inventory on a unified basis across its system.[3] CN also would incur additional expense and lost transit time in changing out EOTs prior to trains arriving at the border. With respect to CNR's line through northern Minnesota, which forms the relatively short middle segment of a through CNR route between Winnipeg, Manitoba and Thunder Bay, Ontario, the practical result is that eight-watt EOTs could not be used on any portion of that route at all, Canadian or American. A consistent eight-watt standard would facilitate cross-border movements while enhancing the safety margin for EOTs.

CN notes in this respect the Commission's request for comments (*Second Notice* at ¶ 34) on whether something less than a six-watt increase in permissible EOT telemetry transmission power (from two watts to eight watts) is warranted. While a smaller increase would still be preferable to the current two-watt restriction, it would not be consistent with either the standard that has evolved in Canada or with the front-to-rear standard for two-way EOT devices, both of which are eight watts. Particularly in the absence of any evidence from the Canadian experience that an eight-watt level has been problematic, CN strongly supports the six-watt change to Section 90.328(e) that was proposed by the AAR and tentatively approved by the Commission.

---

[3] CN's eight-watt EOTs are converted from existing two-watt units, but the required modifications are of a semi-permanent nature and cannot be done on a repeated basis each time a train crosses the border.

Respectfully submitted,

By: _____

Theodore K. Kalick
Senior U.S. Regulatory Counsel
Canadian National
601 Pennsylvania Avenue, N.W.
Suite 500 North Building
Washington, DC 20004
(202) 347-7196

Thomas J. Litwiler
Fletcher & Sippel LLC
29 North Wacker Drive
Suite 920
Chicago, Illinois 60606-2832
(312) 252-1500

ATTORNEYS FOR
CANADIAN NATIONAL

Dated: May 14, 2010